

**REMARKS/ARGUMENTS**

Applicant has canceled Claims 10-25 provided in the previous office action. Claims 26-42 are newly entered in the current office action. Claims 26-42 are fully supported in the original specification, and do not introduce new or additional subject matter.

5 Consideration of claims 26-42 pending in this office action are respectfully requested.

Claims 10-25 have been previously rejected under 35 U.S.C 112 in the 9/15/2006 office action as failing to have its subject matter fully described in the written specification. New claims 26-42 are therefore added in response to the original office 10 action sent on 3/27/2006. Remarks below therefore refer specifically to the office action rejections provided on 3/27/2006 in light of the newly added claims by the Applicant.

***Claims 1-9 are rejected under 35 U.S.C 103(a) as being unpatentable over Reddy et al (Reddy herein) US 5,847,617.***

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Applicant has introduced new claims 26-35 in response to the 35 U.S.C 103(a) rejection of claims 1-9 above in view of Reddy. Applicant points out that the claim structure of claims 26-35 is parallel to that of original claims 1-9 (ie, claim 26 replaces claim 1, claim 27 replaces claim 2, etc..).

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Regarding claim 26, applicant asserts that claim 26 should be found patentable over Reddy because Reddy fails to teach at least the following limitations of claim 26:

25 **“a controller, coupled between the multiplexer and the detector, for determining the control signal according to the detecting signal”**

and

**“wherein the multiplexer, the detector and the controller are formed as a close loop**

**for determining the output oscillating clock from one of the oscillating signals”**

The Examiner has mentioned in the 03/27/2006 office action that it would have been obvious to one of ordinary skill in the art to recognize that a controller (programmable logic device, col.2, line 1-3) coupled to the frequency detector to obtain center frequency information, such that it can be stored in the memory for outputting the control signal (memory data) to the multiplexer according to the detected signal (the center frequency information)(Col.1, line 52-Col. 2, line 37). However, a person skilled in the art would also understand that having the memory 92 coupled to the phase/frequency detector 21 is impractical/impossible **because of the phase/frequency detector 21 detecting reference clock 14 and compare clock 18 will adjust the final input 28 of VCO 26 to synchronize the compare clock 18 and reference clock 14, rather than write data into memory to select the path length of VCO 26.** In other words, if memory 30 is coupled to phase/frequency detector 21, the phase-locked loop will not be in normal operation and the reference clock 14 and compare clock 18 will not be synchronized. Additionally, applicant points out that the disclosure of Reddy et al’s invention is an **open loop method** to set the path length configuration data stored in memory 92, which means that **there is no feedback loop or close loop existing in the VCO 26** to generate a controlling signal to control the MUX 68. Therefore, applicant asserts there is no motivation provided by Reddy to teach a feedback loop or a closed loop VCO 26.

Additionally, applicant points out that Reddy fails to disclose the limitation of “a controller, **coupled between the multiplexer and the detector**, for determining the control signal according to the detecting signal” because coupling memory 30 and phase/frequency detector 21 is incorrect. Also, Reddy fails to disclose the limitation of “wherein the multiplexer, the detector and the controller **are formed as a close loop** for determining the output oscillating clock from one of the oscillating signals” because of the method of controlling the MUX 90 in the disclosure of Reddy et al is an open loop

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design (Only use memory 92 to control the MUX 90). Therefore, applicant respectfully requests reconsideration for allowance of claim 26, as Reddy does not teach or suggest the limitations provided in claim 26.

5       Regarding claims 27-35, applicant points out that these claims are dependent on claim 26 above. Therefore, should an allowance be made for claim 26 above, applicant asserts that allowances should equally be made for claims 27-35 as being dependant on claim 26. Reconsideration of claims 27-35 is respectfully requested.

10       Regarding claim 36, applicant points out that it a method claim analogous to claim 26 above. Therefore, applicant asserts that claim 36 should be found patentable over Reddy for the same rationale described above in claim 26. Consideration for the allowance of claim 36, in light of the reasons provided for claim 26, is respectfully requested.

15       Regarding claims 37-42, applicant points out that they are dependent upon claim 36. Therefore, should an allowance be made for claim 36, applicant points out that allowances should equally be made for claims 37-42 as being dependent on claim 36.

20       Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

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Sincerely yours,

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10 Note: Please leave a message in my voice mail if you need to talk to me. (The time in D.C.  
is 13 hours behind the Taiwan time, i.e. 9 AM in D.C. = 10 PM in Taiwan.)